L Impact of adopting a flat fee 26 system of taxation for heavy MT trucks in Montana



IMPACT OF ADOPTING A FLAT FEE SYSTEM OF TAXATION

FOR HEAVY TRUCKS IN MONTANA

Office of Research and Information Montana Department of Revenue

August 29, 1996

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Impacts of Adopting a Flat Fee System of Taxation for Heavy Trucks in Montana

This paper provides a follow-up to the proposal paper presented earlier dated August 7, 1996 and having the same title. At the August 20, 1996 meeting of the Motor Vehicle Advisory Committee working group, it was decided that several refinements to the proposal drafted earlier were needed. This paper presents those modifications, and provides the impacts that arise as a result.

The working group decided to continue to explore a single flat fee schedule that would apply to all heavy trucks, and would result in overall revenue neutrality. Heavy trucks include those vehicles currently taxed as Class 8 personal property and interstate vehicle fleets (IRP vehicles). The flat fees should incorporate current law proration and apportionment for interstate vehicle fleets. Revenue from flat fees applied to heavy trucks not a part of an interstate fleet should continue to be distributed on the basis of relative mill levies; flat fee revenue from interstate vehicle fleets should continue to be distributed to counties on the basis of relative tax base. It was further decided that the flat fee schedule should be based on the following four weight classes:

Class	GVW
1	0 - 16,000
2	17,000 - 24,000
3	25,000 - 54,000
4	55,000+

The previous proposal provided for a flat fee schedule that was based on three-year age groupings, and proposed flat fees that increased liability for IRP vehicles by about \$98,000 while reducing liability on Class 8 trucks by a similar amount. The proposal suggested at the August 20 meeting would require not only revenue neutrality overall, but also revenue neutrality within each subgroup of vehicles; that is, for Class 8 trucks and for IRP vehicles.

It also was decided that the age groupings should be narrower to achieve a greater degree of revenue neutrality among vehicles of the same age. Consequently, the proposal presented here provides for 16 age groups: ten groups of a single year for vehicles age 1 through 10; five groups of two years each for vehicles aged 11 through 20; and a final group for all vehicles age 21 or older.

Current Law Data

Attachments 1 and 2 provide current law information. Attachment 1 shows the distribution of Class 8 trucks and IRP vehicles, by proposed age groups and weight classes. The



shaded areas of the tables indicate where these vehicles tend to be heavily concentrated. Class 8 trucks tend to be older and lighter, with 62% in the oldest age group, and 86% with a GVW of less than 55,000. IRP vehicles, on the other hand, tend to be newer and heavier, with 79% ten years old or less, and 84% with a GVW of 55,000 or more.

To prevent large shifts in tax liability between age groups or weight classes in going to a flat fee schedule, the proposed schedule should, to as great a degree as possible, reflect current law average tax liability within each age group and weight class. *Attachment 2* shows the current law average tax for Class 8 trucks, and the current law average tax before proration and apportionment for IRP vehicles. These are the relevant averages on which flat fees should be based in order to approach revenue neutrality. If there is a large disparity between Class 8 trucks and IRP vehicles with respect to these averages, then the setting of a single flat fee that will apply to both vehicle types will necessarily result in some degree of revenue shifting.

For example, look at the table cells defined by vehicles with GVW of 16,000 or less that are one year old. For Class 8 trucks the current law average tax is \$955. A flat fee schedule that results in revenue neutrality for these trucks would require a flat fee of \$955. Now look at the same cell for the IRP vehicles table—the average tax is only \$364! For these vehicles revenue neutrality would require a flat fee of \$364. Clearly, using a single flat fee for both Class 8 trucks and IRP vehicles will result in a shift in revenue for vehicles in this age group and weight class. This is true for nearly all of the cells in the table; that is, there are big differences in the current law average tax being paid by Class 8 trucks, when compared to IRP vehicles, for all combinations of age groups and weight classes. In other words, a single flat fee schedule that applies to both Class 8 trucks and IRP vehicles, while revenue-neutral overall, and revenue-neutral for both subgroups of vehicles, necessarily results in revenue shifts among individual combinations of age groups and weight classes.

Given this understanding, Attachment 3 provides a revenue-neutral flat fee schedule, based on tax year 1995. Attachment 4 shows the impact of this flat fee schedule on Class 8 trucks and IRP vehicles. The schedule results in no change in liability for either Class 8 trucks as a group, or for IRP vehicles as a group, but shows that there is revenue shifting among separate combinations of age and weight for both subgroups.

Attachment 5 adds perspective to this revenue shifting by showing the average dollar change in tax. Because 84% of all IRP vehicles are in the heaviest weight class, overall revenue neutrality for these vehicles depended critically on revenue neutrality for the IRP vehicles in this weight class. However, note that achieving revenue neutrality for IRP vehicles of 55,000 GVW or greater necessarily results in a reduction in liability for Class 8 trucks of the same weight class. This revenue loss must be made up by increasing liability on vehicles in lighter weight classes, particularly the 17,000 - 26,000 GVW weight class.



Attachments 6 and 7 show the distribution of tax liability changes for Class 8 trucks and IRP vehicles, respectively. For Class 8 trucks, 8,244 trucks (24%) experience a decrease or no change in liability; 23,578 trucks (67%) experience an increase in liability of less than \$50; and 3,220 trucks (9%) experience an increase in liability of over \$50.

For IRP vehicles, 3,204 trucks (41%) experience a decrease or no change in liability; 3,455 trucks (44%) experience an increase in liability of less than \$50; and 1,177 trucks (15%) experience an increase in liability of over \$50.

Attachment 8 shows the impact of this proposal on local governments. The flat fee schedule, when applied to Class 8 trucks, reduces funding to local governments a total of \$21,000. However, the proposal to switch to depreciation schedules tied to MSRP for light cars and trucks increases funding to local governments by a similar amount, making the revenue impact neutral overall for local governments. Note that because the flat fee proposal for IRP vehicles is revenue neutral there is no impact on local governments for this change.

All of the analysis pertaining to flat fees was done using tax year 1995 data. The taxable valuation rate for Class 8 property in that year was 9 percent; this rate also applies to IRP vehicles for taxation purposes. SB417, 1995 Legislative Session, reduced that rate to 6% by the year 1998. Consequently, the flat fee schedule based on 1995 data, if effective initially in 1998, must be reduced by one third to reflect the drop in the rate from 9 to 6 percent. Attachment 9 provides a schedule of flat fees that have been reduced by one third that would be effective in 1998. This is the schedule that should be incorporated into statute if this proposal moves forward, as reducing the flat fees by one third reduces the revenue generated from the schedule by one third.

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Distribution of Class 8 Trucks by Age and Weight

		Weight Gro	oup (GVW)		
Age	<=16	17 - 26	27 - 54	55+	Totals
1	2	25	38	10	75
2 3	13	. 53	111	86	263
3	19	86	88	78	271
4	23	60	109	61	253
5	17	97	155	67	336
6	24	95	162	117	398
7	29	82	166	159	436
8	31	126	176	211	544
9	24	95	169	198	486
10	25	105	216	199	545
11 - 12	39	270	473	543	1,325
13 - 14	41	228	498	296	1,063
15 - 16	66	383	953	449	1,851
17 - 18	121	666	1,481	633	2,901
19 - 20	141	745	1,371	417	2,674
21+	2,379	10,601	7,389	1,252	21,621
Totals	2,994	13,717	13,555	4,776	35,042
101013	2,334	13,717	10,000	7,770	33,042

Distribution of IRP Vehicles by Age and Weight

Age	<=	16	17 - 26	27 - 54	5	5+	To	tals
1		51	86	6 48	3	1,142		1,327
2		31	27	' 33	3	638		729
3		33	14	↓ . 3€	3	445		528
4		23	16	30	O	503		572
5		23	23	3 42	2	574		662
6 7		25	18	3	3	624		700
		21	11	30	0	493		555
8		7	. (27	7	384		424
9		12	Ç		2	257		300
10		5	-	7 4	1	336		389
11 - 12		25	11	44	4	323		403
13 - 14		15	16	5 56	6	238		325
15 - 16		8	18	3 54	4	241		321
17 - 18		5	(34	4	163		211
19 - 20		5	10	3	1	74		120
21+.		8	10) 66	6	186		270
Totals		297	29	62	7 •	6,621		7,836



Current Law Average Tax - Class 8 Trucks

			Weight	Group		
Age		<=16	17 - 26	27 - 54	55+	Average
1		955	720	1,589	1,812	1,312
2 3		620	623	791	1,237	894
		416	523	632	1,164	735
4		367	398	631	735	577
5		294	332	510	779	501
6 7		302	315	386	57.1	419
		239	244	349	509	380
8		194	232	307	447	337
9		188	214	287	411	318
10		131	157	234	334	251
11 - 12		121	132	204	273	215
13 - 14		99	87	136	194	140
15 - 16		. 130	77	101	158	111
17 - 18		70	55	79	129	84
19 - 20		52	38	58	111	60
21+		26	24	37	78	31
	1					
Average		51	49	100	252	96

CL Ave. Tax Before Proration and Apportionment - IRP Vehicles

		Weight Group						
Age	<=16	17 - 26	27 - 54	55+	Average			
1	364	631	847	1,153	1,078			
2 3	227	379	629	931	867			
3	305	337	677	848	789			
4	146	219	634	895	832			
5	134	162	524	642	600			
6 7	107	213	700	531	516			
	124	· 105	724	434	431			
8	118	248	245	380	365			
9	76	105	290	336	315			
10	60	114	410	· 284	291			
11 - 12	48	96	303	247	237			
13 - 14	31	77	372	223	233			
15 - 16	33	48	223	178	175			
17 - 18	35	136	233	139	152			
19 - 20	26	56	112	98	95			
21+	50	32	96	103	97			
Average	175	309	. 423	635	589			



Proposed Law Flat Fee Schedule

	-	Weight Gro	oup (GVW)	
Age .	<=16 ⁻	17 - 26	27 - 54	55+
1	351	501	852	1,125
2	327	450	-750	900
3	300	402	660	798
4	276	351	552	726
5	249	327	480	585
6	225	.300	402	501
7	198	273	351	441
8	174	249	300	375
9	150	· 225	276	327
10	123	174	237	276
11 - 12	99	150	201	228
13 - 14	84	111	156	183
15 - 16	75	90	114	141
17 - 18	54	78	87	108
19 - 20	39	57	66	78
21+	30	36	48	60

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Age <=16 1,909 2 8,064 3 7,903 4 8 439	. VAloigh															
4 2903 1,909 1,909 7,903 8,439	VVEIDE	Weight Group					Weight	Weight Group					Weight Group	Group		٠
1,909 8,064 7,903 8,439	17 - 26	27 - 54	55+	Totals	Age	<=16	17 - 26	27 - 54	55+	Totals	Age	<=16	17 - 26	27 - 54	55+	Totals
8,064 7,903 8,439	17,994	60,381	18,116	98,400	-	702	12,525	32,376	11,250	56,853	-	(1,207)		(28,005)	(998'9)	(41,547)
7,903	33,006	87,802	106,357	235,229	7	4,251	23,850	83,250	.77,400	188,751	2	(3,813)		(4,552)	(28,957)	(46,478)
8 439	44,951	55,592	90,789	199,235	ო	5,700	34,572	58,080	62,244	160,596	m	(2,203)	$\overline{}$	2,488	(28,545)	(38,639)
0000	23,876	68,804	44,849	145,968	4	6,348	21,060	60,168	44,286	131,862	4	(2,091)	<u> </u>	(8,636)	(263)	(14,106)
4,992	32,232	79,075	52,182	168,481	2	4,233	31,719	74,400	39,195	. 149,547	2	(759)		(4,675)	(12,987)	(18,934)
7,239	29,920	62,544	66,864	166,566	9	5,400	28,500	65,124	58,617	157,641	ဖ	(1,839)		2,580	(8,247)	(8,925)
6,928	20,005	57,921	80,902	165,756	7	5,742	22,386	58,266	70,119	156,513	<u> </u>	(1,186)		345	(10,783)	(9,243)
6,010	29,192	53,986	94,290	183,477	&	5,394	31,374	52,800	79,125	168,693	80	(616)	2,182	(1,186)	(15, 165)	(14,784)
4,517	20,337	48,553	81,317	154,723	6	3,600	21,375	46,644	64,746	136,365	<u>თ</u>	(917)		(1,909)	(16,571)	(18,358)
3.270	16,477	50,482	66,465	136,695	10	3,075	18,270	51,192	54,924	127,461	9	(195)	1,793	710	(11,541)	(9,234)
12 4.729	35,620	96,548	148,014	284,912	11 - 12	3,861	40,500	95,073	123,804	263,238	11 - 12	(868)		(1,475)	(24,210)	(21,674)
14 . 4.066	19,732	67,691	57.440	148,929	13 - 14	3,444	25,308	77,688	54,168	160,608	13 - 14	(622)		266'6	(3,272)	11,679
16 8,600	29 439	96 719	70.814	205 572	15 - 16	4 950	34 470	108 642	63 309	211 371	15.18	(3,650)		11 923	(7.505)	5 799
	36 756	117 552	81 554	277 486	17.7	6 534	51 0/B	128 847	68 364	255,693	٠,	(1,090)	•	11 295	(13.290)	11 207
7,00	20,730	70,07	01,004	744,400	•	1007	21,340	20,041	20,004	470,035)	(1,000)		10,400	(43,535)	7000
64 064	240,510	770 567	40,133 07,358	678 501	· •	71 370	381 636	357,672	75 120	882 788	٠ ٠	10 306	÷	84 105	(13,027)	204 297
50,10	110,04	100,012	000,10	100'00'		-	000,100	224,012	12,120	002:100	- 1	25.5.	-1	7, 100	122,200	201,20
Totals 153,640 6	67,365 1	667,365 1,354,110 11,203,563	,203,563	3,378,679	Totals	140,103	140,103 821,958 1,437,708	,437,708	979,197	3,378,966	Totals	(13,537)	(13,537) 154,593	83,598	(224,366)	287
CL	Total Ta	Total Tax - IRP Vehicles	icles			Propose	Proposed Law Total Tax	1	RP Vehicles			Cha	Change In Tax - IRP Vehicles	x - IRP Ve	hicles	
						••										
	Weight	Weight Group					Weight	Weight Group					Weight Group	Group		
100		Sloup 27 F.		Totale	000	1110	17 26	27 54	554	Totale	000	711E	17.26	27 - 54	55+	Totale
_	07-11	PC - 17	tee	lolals	265	0111	07-/1	21 - 34		Iolalis		2	7	21.2		CIBIO
	13,491	24,017	308,895	356,040	₹-	9,616	11,415	24,860	309,280	355,171	- ((21)	_	843	386	(898)
	3,816	10,856	126,940	144,824	- 2	4,910	5,395	15,957	125,806	152,068	7	1,698		5,101	(1.134)	7,244
_	1,897	13,311	90,884	109,926	m	4,761	2,664	14,119	91,088	112,632	က	927		808	204	2,706
	1,668	5,833	83,059	92,294	4	3,324	2,996	8,752	78,437	93,509	4	1,590	1,328	2,919	(4.621)	1,216
	2,005	10,843	89,717	104,477	2	3,400	4,301	11,409	92,478	111,588	2	1,488		999	2,761	7,111
_	1,900	12,869	19,990	96,365	9	3,260	2,515	7,265	84,441	97,481	ပ	1,654	615	(5,604)	4,451	1,117
	724	9,184	61,221	72,232	7	2,079	1,862	5,244	69,336	78,521	7	926	1,138	(3,940)	8,116	6,289
_	741	3.597	45.500	50.180	80	573	837	4.744	49.525	55.679	80	231	96	1,147	4.026	5.499
_	524	3 507	27.562	32,029	6	. 897	1.132	3,112	30.072	35,213	o	460	9	(394)	2.510	3,184
	423	10,233	33 336	44 148	100	305	828	5 712	34 457	41 301	9 6	149		(4 521)	1 120	(2 847)
12	532	8 826	33 344	43.282	11 - 12	1 334	875	5 994	31 296	30 499	11.12	754		(2 832)	(2 048)	(3.783)
	767	13 891	21.875	36.743	13-10	577	1 224	20,00	19 344	27,059	13-14	367	457	(700,7)	(2,531)	(9,683)
- 4	464	5.536	19 219	25,365	15-16	327	841	3.410	16 181	20,759	15-16	180	378	(2.126)	(3,038)	(4 606)
	20.5	A 959	11,679	17 210	٠,	070	437	1 937	908	11 370	- +	200	(67)	(3.021)	(0,230)	(5,840)
	26.4	1,990	3 380	2 202 2		, C C	312	250, 4	2,603	1,010)	7 4 5	77	(5,02)	(2)	(1 261)
	104	000.0	000,0	2,032	I 4	2 2 2	212	1,212	2,003	4,42	I 4	1 6	2 6	(0/2)	(111)	(100,1)
1117	1/01	3,300	9,236	13,192	17	134	0	1,633	2,044	1,014	+17		167	11,732/	(2,237)	0/2'(2)
Totals 25,252	29,878	142,933 1,045,835	,045,835	1,243,898	Totals	35,698	37,814	121,497 1	1,048,888	1,243,897	Totals	10,446	7.937	(21,436)	3,053	0



Average \$ Change in Tax - Class 8 Trucks

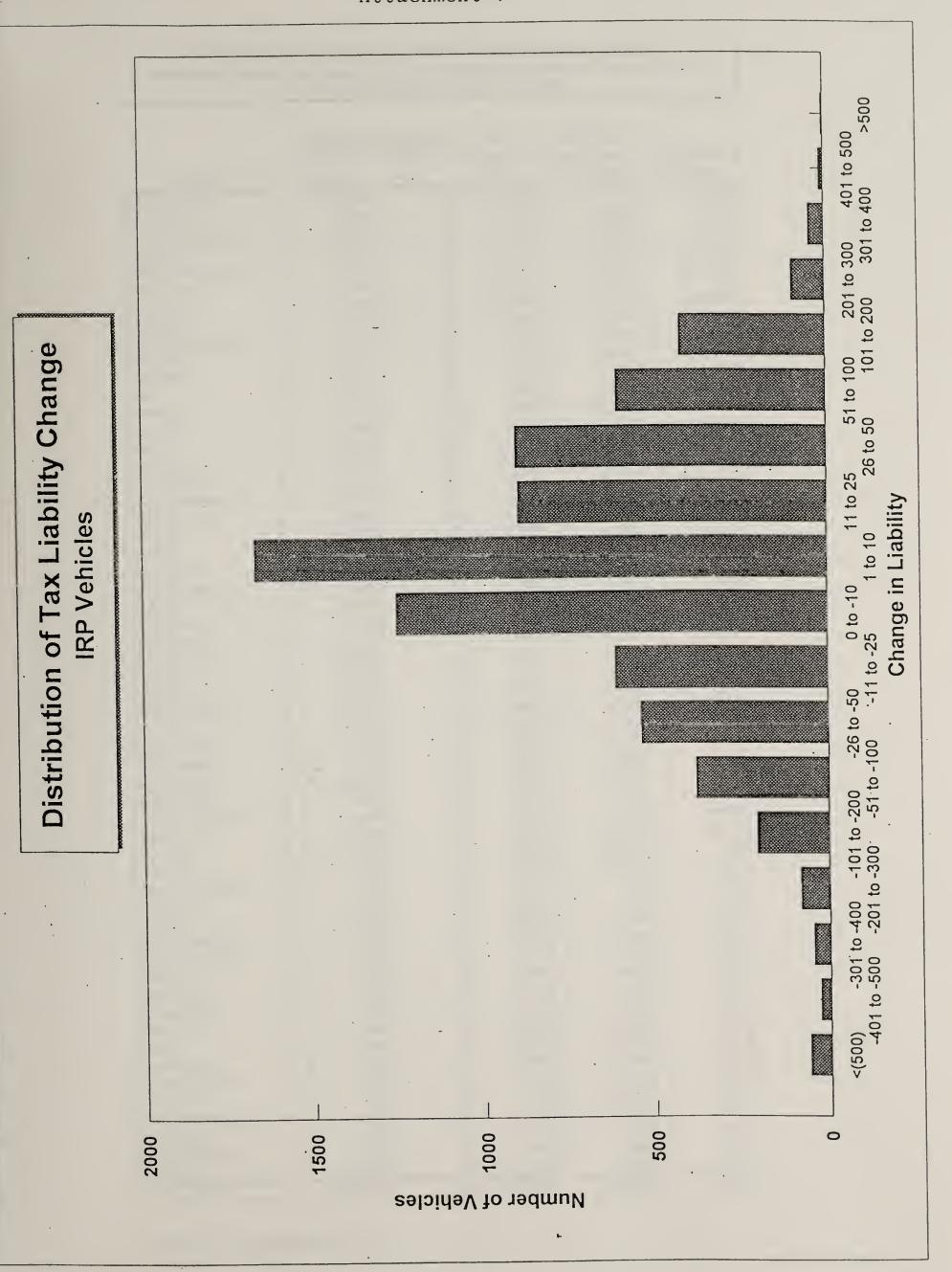
		Weight	Group		
Age	<=16	17 - 26	27 - 54	55+	Average
1	(604)	(219)	(737)	(687)	(554)
2	(293)	(173)	(41)	(337)	(177)
3	(116)	(121)	28	(366)	(143)
4	(91)	(47)	(79)	(9)	(56)
5	(45)	(5)	(30)	(194)	(56)
6.	(77)	(15)	16	(70)	(22)
7	(41)	29	2	(68)	(21)
8	(20)	17	(7)	(72)	(27)
9	(38)	11	(11)	(84)	(38)
10	(8)	17	3	(58)	(17)
11 - 12	(22)	18	(3)	(45)	(16)
13 - 14	(15)	24	20	(11)	11
15 - 16	(55)	13	13	(17)	3
17 - 18	(16)	23	8	(21)	4
19 - 20	(13)	19	8	(33)	3
21+	4	12	11	(18)	9
Average	(5)	11	6	(47)	0

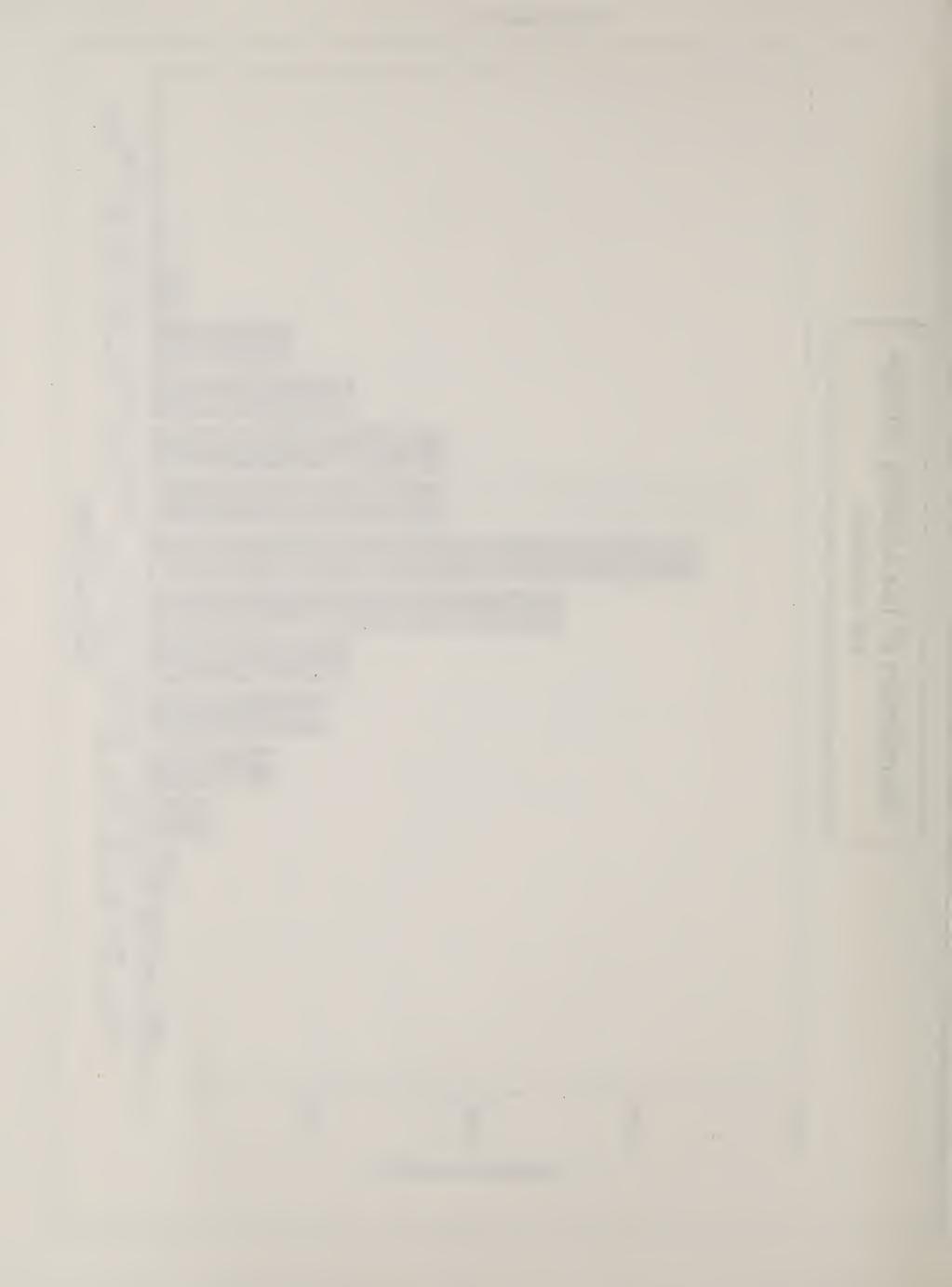
Average \$ Change in Tax - IRP Vehicles

		Weight	•	Weight Group						
Age	<=16	17 - 26	27 - 54	55+	Average					
1	(0)	(24)	18	0	(1)					
2 3	. 55	58	155	(2)	10					
3	28	_ 55	22	0	5					
4 .	69	83	97	(9)	2					
5	65	100	13	5	11					
6	66	. 34	(170)	7	2					
7	46	103	(131)	16	11					
8	33	16	42	10	13					
9	38	68	(18)	10	11					
10	30	58	(110)	3	(7)					
11 - 12	30	31	(64)	(6)	(9)					
13 - 14	. 24	29	(142)	(11)	(30)					
15 - 16	23	21	(39)	(13)	(14)					
17 - 18	6	(7)	(89)	(17)	(28)					
19 - 20	8	5	(22)	. (11)	(11)					
21+	(10)	2	(26)	(19)	(20)					
Average	35	27	(34)	0	(0)					









Combined Impact of Motor Vehicle Taxation Reform Proposal Impact to Local Governments (Cities and Towns; Counties, Incl. Loc. Op. Tax)

Tax Year 1995; Class 8 Tax Rate of 9%

	Impact of	Impact of	Total	Impact of	
	Flatfee:	Flatfee:	Impact of	Light Cars	Net Total
County	Class 8	IRP	Flatfee:	and Trucks	Impact
SILVER BOW	(17,465)		(17,465)	4,106	(13,359)
CASCADE	(8,391)		(8,391)	13,829	5,438
YELLOWSTONE	15,620	0	15,620	(8,236)	7,384
MISSOULA LEWIS AND CLARK	(43,779)	0	(43,779) (2,411)	(23,976)	(67,755)
GALLATIN	(2,411)	0	(12,424)	(28,983)	(11,834) (41,407)
FLATHEAD	(34,983)		(34,983)	(24,260)	(59,244)
FERGUS	1,459	0	1,459	3,544	5,003
POWDER RIVER	(297)	0	(297)	2,634	2,336
CARBON	2,877	0	2,877	2,003	4,879
PHILLIPS	4,333	0	4,333	329	4,662
HILL	5,484	0	5,484	6,906	12,390
RAVALLI	(195)	0	(195)	(12,869)	(13,064)
CUSTER	(691)	0	(691)	9,704	9,013
LAKE	(3,177)	0	(3,177)	10,196	7,019
DAWSON .	(4,063)	0	(4,063)	4,973	910
ROOSEVELT	3,733	0	3,733	4,638	8,371
BEAVERHEAD	1,222	0	1,222	2,438	3,660
CHOUTEAU	5,363	0	5,363	2,357	7,719
VALLEY	1,553	0	1,553	2,481	4,034
TOOLE	5,074	0	5,074	1,040	6,114
BIG HORN	5,023	0	5,023	2,609	7,631
MUSSELSHELL BLAINE	(186)	0	(186)	1,117	932
MADISON	5,595		5,595 (135)	5,125 (2,192)	10,721 (2,327)
PONDERA	2,962	. 0	2,962	1,657	4,619
RICHLAND	6,879	0	6,879	6,175	13,054
POWELL	1,751	0	1,751	(334)	1,417
ROSEBUD	3,604	o	3,604	2,744	6,348
DEER LODGE	(2,844)		(2,844)	1,325	(1,519)
TETON	3,403	0	3,403	5,823	9,226
STILLWATER	2,334	0	2,334	2,977	5,311
TREASURE	(272)	. 0	(272)	2,086	1,814
SHERIDAN	5,294	0	5,294	4,148	9,442
SANDERS	683	0	683	2,119	2,803
JUDITH BASIN	3,840	0	3,840	650	4,489
DANIELS	2,400	0	2,400	2,219	4,619
GLACIER	(1,320)	l .	(1,320)	8,670	7,350
FALLON SWEET GRASS	3,428	0	3,428 519	3,027	6,455 579
MCCONE	2,548	0	2,548	195	2,743
CARTER	1,372	0	1,372	1,743	3,115
BROADWATER	2,339	0	2,339	1,834	4,174
WHEATLAND	910	Ö	910	963	1,872
PRAIRIE	1,281	ō	1,281	1,455	2,736
GRANITE	(713)		(713)	819	106
MEAGHER	255	0	255	(810)	(555)
LIBERTY	6,145	₋ 0	6,145	(1,122)	5,022
PARK	1,578	0	. 1,578	(1,909)	(331)
GARFIELD	2,882	0	2,882	996	3,878
JEFFERSON	720	0	720	(2,179)	(1,459)
WIBAUX	(13)		(13)	2,161	2,148
GOLDEN VALLEY MINERAL	333	0	333	1,142	1,475
PETROLEUM	(176)	0	(176) 448	(425)	(601)
LINCOLN	(2,724)	4	(2,724)	790	836 (1,934)
State	(21,013)	U	(21,013)	19,474	(1,540)



Attachment 9

Proposed Law Flat Fee Schedule - Tax Year 1998

		Weight Gro	oup (GVW)	
Age	<=16	-17 - 26	27 - 54	55+
1	234	. 334	568	750
2	218	300	500	600
3	200	268	440	532
4	184	234	368	484
5	166	218	. 320	390
6 . '	150	200	268	334
7	. 132	182	234	294
8	116	166	200	250
9 .	100	150	184	218
10	82	116	158	184
11 - 12	66	100	134	152
13 - 14	56	74	104	122
15 - 16	50	60.	76	94
17 - 18	36	52	58	72
19 - 20	26	38	44	52
21+	20	24	32	40

g:\123\motveh\flatfee3.wk4



Distribution of Vehicles by Change in Liability

	Number of	Vehicles
Change	Class 8	IRP
<(500) -401 to -50 -301 to -40 -201 to -30 -101 to -20 -51 to -100 -26 to -50 -11 to -25 0 to -10 1 to 10 11 to 25 26 to 50 51 to 100 101 to 200 201 to 300 301 to 400 401 to 500 >500	276 97 175 420 1,202 1,885 1,720 1,294 1,175 3,349 13,645 6,584 2,000 795 237 103 44 41	61 29 47 83 205 379 536 610 1,254 1,666 891 898 603 418 95 44 13
Totals	35,042 27,767 79.2%	7,836 5,855 74.7%
	19463 0.555419	4421 56.4%

